

# Useful IDEAS for Car Drivers

## Mixture Cleans Carbon Out of Motor

**W**HILE undoubtedly the best method of removing the carbon from an automobile motor is to take off the cylinder head and scrape and polish it away, various solvents will have a beneficial effect in many cases. One of these mixtures consists of 16 ounces of kerosene, 2 ounces of glycerine and 2 ounces of hydrogen peroxide. The method of injecting this and other mixtures designed to remove carbon is shown in Fig. 1. A rubber tube is slipped over the spout of a small funnel and the end of the tube is inserted in the air intake opening of the carburetor. After the motor has been operated until it



Fig. 1. How to put carbon removing mixture in car.

comes out. If you find yourself a long way from a service station and the radiator develops a leak, remove the rubber tubing that is used to operate the windshield wiper, at the wiper, and slip this end over the end of the overflow pipe instead. If the radiator cap fits reasonably air tight, the reduced pressure created in the radiator will cause air to flow slowly through the leak into the radiator and while that is going on no water can get out. So long as the motor is running the radiator consequently will not leak a drop. Of course this method will not work with a severe break in the radiator such as an open seam in the upper or lower water compartments as the large opening would let through so much air that the carburetor mixture would be disturbed and the motor would miss.

**T**HE air pressure in tires should be regulated by the load in the car and not by sticking to some arbitrary figure.

For example, if you are going on a long drive alone, the car will ride better and the tires will not suffer if the pressure is dropped from three to five pounds in the rear shoes. The front shoes also could be operated at lower pressure with improved riding qualities but soft front tires often result in shimmy.

**D**DOUBLE filament headlight bulbs are no longer useful in the headlights when one filament burns out. However these bulbs can be converted into single contact bulbs useful for dome, stop lights and so on by a simple job of soldering. If you examine such a bulb you will find that there are two contacts at opposite sides of the insulation that protrudes from the base. Take a soldering iron as shown in Fig. 5, and flow a little solder across the insulation joining the two contacts. Be careful that no solder flows down over the insulation and makes contact with the metal shell as this would cause a short circuit.

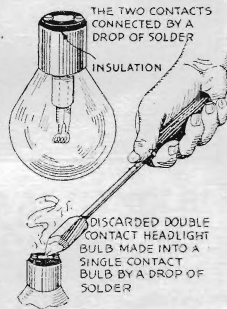


Fig. 5. Solder turns double filament bulb into fine stop light.

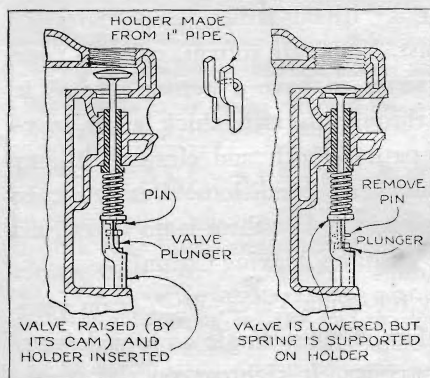


Fig. 2. A piece of iron pipe cut out on two sides is handy tool to hold up valve spring.

reaches normal temperature, it is set to operate at fairly high speed and then the mixture is slowly poured into the funnel. The rate at which the mixture is fed in should not cause the motor to miss.

**F**IG. 2 shows a novel tool designed to facilitate quick valve grinding jobs. Instead of using a regular type of valve tool to lift the valve and thus permit the removal of the retaining pin and the spring, this tool is slipped in under the valve as shown while the latter is in the fully open position. Cranking the car one full turn will drop the valve plunger leaving the spring supported in the up position by the device. The pin can be removed and the valve ground without disturbing the spring, washer and so on.

To make this device, take a piece of iron pipe just long enough to slip under the washer when the valve is in the open position. With a hacksaw cut through the side of the pipe in a lengthwise direction. Then cut away

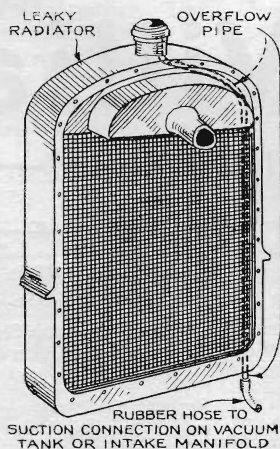


Fig. 4. How air pressure is used to stop leaky radiator.

**G**LARE from the headlights of cars approaching from the rear often shines in the rear vision mirror in a most annoying manner. Fig. 3 shows how to prevent this and still retain the use of the mirror. Make a simple frame of heavy iron wire slightly larger than the size of the mirror. Hinge this at the bottom under the top portion of the mirror mounting as shown. The details of the method depend on the method of construction. Cover the frame with a single layer of thin black silk cloth. If the cloth is thin enough, the headlights of cars behind will show through sufficiently.

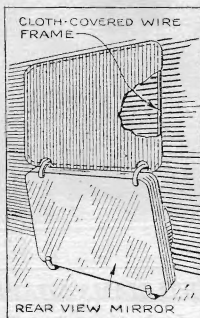


Fig. 3. Silk cloth used to shield car mirror.

**M**ANY methods have been proposed for emergency radiator repairs. A most ingenious one is shown in Fig. 4. Instead of attempting to repair the leak, atmospheric pressure is utilized to keep the water from

## WIN A \$10 PRIZE

Each month we award \$10 for the best idea sent in for motorists. This month's prize goes to R. H. Moore, Lombard, Ill. (Fig. 4). Contributions are requested from all automobile mechanics and if published will be paid for at regular space rates.